Application for Use of State-owned Aquatic Lands

Applicant Name: Port of Longview
County: Clark County
Water Body: Columbia River
Type of Authorization - Use: Right of Entry – Navigational Dredging
Authorization Number: 23-Not Yet Assigned
Term: 10 year
Description: This agreement will allow entry to State-owned aquatic lands for the sole purpose of dredging Berths 1-9 at the Port of Longview.
Port of Longview
2011-2021 Dredging ROE

Appox. Berth 9 sampling and dredging
Phased project over 10 years

Project Boundary

Description
JARPA and Sampling plan only show 3 sampling sites off of Berth 9.
Over 10 years the Port plans to dredge all the Berths from the face of the wharfs to the navigation channel 50 ft in water disposal downstream.

Prepared By: DO Date: 4/26/11
Part 1–Project Identification

1. Project Name (A name for your project that you create. Examples: Smith’s Dock or Seabrook Lane Development)  
Port of Longview Berth Maintenance Dredging and Deepening Project

Part 2–Applicant

The person or organization responsible for the project.  

2a. Name (Last, First, Middle) and Organization (if applicable)  
Hendriksen, Lisa, Port of Longview (Port)

2b. Mailing Address (Street or PO Box)  
PO Box 1258

2c. City, State, Zip  
Longview, Washington  98632-7739

2d. Phone (1)  
(360) 425-3305

2e. Phone (2)  
(          ) (          )

2f. Fax  
(360) 733-4312

2g. E-mail  
lhendriksen@portoflongview.com

Part 3–Authorized Agent or Contact

Person authorized to represent the applicant about the project. (Note: Authorized agent(s) must sign 11b. of this application.)  

3a. Name (Last, First, Middle) and Organization (if applicable)  
Koellmann, Derek, Anchor QEA, LLC

3b. Mailing Address (Street or PO Box)  
1605 Cornwall Avenue

3c. City, State, Zip  
Bellingham, Washington  98225-4634

3d. Phone (1)  
(360) 733-4311

3e. Phone (2)  
(360) 303-4106

3f. Fax  
(360) 733-4312

3g. E-mail  
dkoellmann@anchorqea.com

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1Additional forms may be required for the following permits:
- If your project may qualify for Department of the Army authorization through a Regional General Permit (RGP), contact the U.S. Army Corps of Engineers for application information (206) 764-3495.
- If your project might affect species listed under the Endangered Species Act, you will need to fill out a Specific Project Information Form (SPIF) or prepare a Biological Evaluation. Forms can be found at http://www.nws.usace.army.mil/PublicMenu/Menu.cfm?sitename=REG&pagename=mainpage_ESA
- If you are applying for an Aquatic Resources Use Authorization you will need to fill out and submit an Application for Authorization to Use State-Owned Aquatic Lands form to DNR, which can be found at http://www.dnr.wa.gov/Publications/aqr_use_auth_app.doc
- Not all cities and counties accept the JARPA for their local Shoreline permits. If you think you will need a Shoreline permit, contact the appropriate city or county government to make sure they will accept the JARPA.

2To access an online JARPA form with help screens, go to http://www.epermitting.wa.gov/site/alias__resourcecenter/jarpa_jarpa_form/9984/jarpa_form.aspx.

For other help, contact the Governor’s Office of Regulatory Assistance at 1-800-917-0043 or help@ora.wa.gov.
Part 4—Property Owner(s)
Contact information for people or organizations owning the property(ies) where the project will occur. [help]

☐ Same as applicant. (Skip to Part 5.)

☐ Repair or maintenance activities on existing rights-of-way or easements. (Skip to Part 5.)

☒ There are multiple property owners. Complete the section below and fill out JARPA Attachment A for each additional property owner.

4a. Name (Last, First, Middle) and Organization (if applicable)
Port of Longview Attn: George Cress

4b. Mailing Address (Street or PO Box)
PO Box 1258

4c. City, State, Zip
Longview, Washington 98632-7739

4d. Phone (1) 4e. Phone (2) 4f. Fax 4g. E-mail
(360) 425-3305 ( ) ( ) gcress@portoflongview.com

Part 5—Project Location(s)
Identifying information about the property or properties where the project will occur. [help]

☐ There are multiple project locations (e.g., linear projects). Complete the section below and use JARPA Attachment B for each additional project location.

5a. Indicate the type of ownership of the property. (Check all that apply.) [help]
☒ State Owned Aquatic Land (If yes or maybe, contact the Department of Natural Resources (DNR) at (360) 902-1100)
☐ Federal
☒ Other publicly owned (state, county, city, special districts like schools, ports, etc.)
☐ Tribal
☐ Private

5b. Street Address (Cannot be a PO Box. If there is no address, provide other location information in 5p.) [help]
10 Port Way

5c. City, State, Zip (If the project is not in a city or town, provide the name of the nearest city or town.) [help]
Longview, Washington 98632-7739

5d. County [help]
Cowlitz County

5e. Provide the section, township, and range for the project location. [help]

<table>
<thead>
<tr>
<th>¼ Section</th>
<th>Section</th>
<th>Township</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>NE/SE</td>
<td>9</td>
<td>7 North</td>
<td>2 West</td>
</tr>
<tr>
<td>SW</td>
<td>8</td>
<td>7 North</td>
<td>2 West</td>
</tr>
</tbody>
</table>
5f. Provide the latitude and longitude of the project location. [help]
   - Example: 47.03922 N lat. / -122.89142 W long. (NAD 83)

   46.10338 N lat. / -122.94990 W long (NAD 83)

5g. List the tax parcel number(s) for the project location. [help]
   - The local county assessor's office can provide this information.

   Parcel 10171

5h. Contact information for all adjoining property owners. (If you need more space, use JARPA Attachment C.) [help]

<table>
<thead>
<tr>
<th>Name</th>
<th>Mailing Address</th>
<th>Tax Parcel # (if known)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R &amp; R Trading Inc.</td>
<td>P.O Box 1276</td>
<td>616140104</td>
</tr>
<tr>
<td></td>
<td>Longview, Washington 98632-7747</td>
<td></td>
</tr>
<tr>
<td>Pacific Lumber &amp; Shipping, LLC</td>
<td>P.O. Box 21785</td>
<td>604210100</td>
</tr>
<tr>
<td></td>
<td>Seattle, Washington 98111-3785</td>
<td></td>
</tr>
<tr>
<td>Weyerhaeuser Company</td>
<td>P.O. Box 9777</td>
<td>608760200</td>
</tr>
<tr>
<td></td>
<td>Federal Way, Washington 98063-9777</td>
<td></td>
</tr>
<tr>
<td>Jones Stevedoring Company</td>
<td>7245 West Marginal Way SW</td>
<td>10175</td>
</tr>
<tr>
<td></td>
<td>Seattle, Washington 98106-1912</td>
<td></td>
</tr>
</tbody>
</table>

5i. List all wetlands on or adjacent to the project location. [help]

None (USFWS 2010)

5j. List all waterbodies (other than wetlands) on or adjacent to the project location. [help]

Columbia River

5k. Is any part of the project area within a 100-year flood plain? [help]

- Yes
- No
- Don't know

5l. Briefly describe the vegetation and habitat conditions on the property. [help]

Vegetation and habitat conditions at the site are limited due to existing development built along the Columbia River shoreline. No riparian vegetation exists at Berths 1 through 9 due to the existing piers extending into the waterway. The Columbia River provides some habitat opportunities for species such as salmon, other fish species, birds, mammals, and other wildlife; however, conditions in the vicinity of the site are highly modified from natural habitat conditions.

5m. Describe how the property is currently used. [help]

The Port property is a multi-use property used for water-dependent operations including upland industrial manufacturing of timber and steel and maritime shipping and handling of bulk materials. The site is accessed by vessels on the Columbia River at Berths 1 through 9, where the proposed Project is to occur. The site can also be accessed by road and rail.

5n. Describe how the adjacent properties are currently used. [help]

The adjacent properties support industrial uses such as wood and steel manufacturing. Residential properties are located to the northwest of the project on the opposite side of Industrial Way (State Route [SR] 432). The Project occurs within the Columbia River, which is locally used primarily for industrial, commercial, and recreational use.
5o. Describe the structures (above and below ground) on the property, including their purpose(s).

Structures that exist within the Project area include the Port’s Berths 1, 2, 4, 5, 6, 7, 8, and 9. There is no Berth 3 at the Port and Berth 4 is not in operation. The Berths include timber, concrete, and steel piers that extend into the water column and are used primarily to facilitate loading and unloading of bulk materials from aquatic vessels. Berths 1, 2, 5, and 9 contain fixed loaders for transferring bulk materials to and from aquatic vessels; Berth 7 utilizes a fixed Krupp crane for transferring bulk materials; and Berths 6 and 7 utilize a portable Liebherr crane for transferring bulk materials. Approximately 330 fender piles are associated with Berths 1 through 8; these fender piles are spaced at approximately 15-foot intervals. The worn or dilapidated untreated wooden fender piles associated with Berths 1 through 7 that pose potential safety concerns for personnel and vessels will be replaced during maintenance and/or dredging activities. The steel fender piles associated with Berths 8 and 9 are in good condition.

5p. Provide driving directions from the closest highway to the project location, and attach a map.

From Olympia, Washington: Take Interstate 5 (I-5) south toward Portland, Oregon, for approximately 65 miles. Take Exit 39 for WA-4 toward Kelso, take the subsequent right at WA-4 W/Allen Street, and drive approximately 1 mile. Turn left at 1st Avenue and drive approximately 0.5 mile, continue onto 3rd Avenue for another approximately 1.7 miles, and continue onto Industrial Way for another approximately 1.5 miles. Turn left at Panel Way and drive approximately 0.3 miles then turn left at Terminal Way and drive straight approximately 400 feet to reach the Project area.

From Portland, Oregon: Take I-5 north toward Olympia, Washington, for approximately 42 miles. Take Exit 36 for WA-432 W toward Longview/Long Beach/WA-4 W and merge onto WA-432 for approximately 3 miles. Continue onto Tennant Way for approximately 1 mile, turn left at Oregon Way, and drive approximately 1 mile. Take a slight right at West Port Way and follow signs for the Port of Longview for approximately 1 mile to reach the Project area (see Vicinity Map; Sheets 1 and 2 of Attachment 1).

Part 6–Project Description

6a. Summarize the overall project. You can provide more detail in 6d.

The Port proposes a series of dredging events to maintain existing permitted depths or deepen the Port’s currently operational berths (known as the Berth Maintenance Dredging and Deepening Project [Project]) located at its facility on the Columbia River at River Mile (RM) 66. Berths 1, 2, 5, 6, 7, 8, and 9 are the operational berths and the Port will also maintain existing depths or deepen Berth 4 in anticipation of future reconstruction. The Project will facilitate access to the Port by deep draft ships that are now able to utilize the deepened navigation channel of the Columbia River. The Port is also requesting authorization to conduct annual maintenance dredging to address sediment accumulation on an as-needed basis. All dredged material is proposed to be placed in water at a downstream location (pending results of sediment characterization). Due to structural concerns, damaged or dilapidated untreated wooden fender piles will be replaced as necessary as part of the proposed maintenance activities.

The Port proposes to conduct the following actions:

1. Deepen Berths 1 through 5, 8, and 9 to a depth of -43+2 feet Columbia River Datum (CRD)
2. Perform maintenance dredging to a depth of -43+2 feet CRD of Berths 1 through 5, 8, and 9, and -40+2 feet CRD of Berths 6 and 7, for a period of 10 years after issuance of permits for the project
3. Place dredged material from maintenance and deepening operations at an approved in-water placement site
4. Replace up to 290 damaged or dilapidated 12- to 16-inch-diameter untreated wooden fender piles at Berths 1 through 7 with in-kind untreated wooden piles at each berth as necessary after the planned dredging events

6b. Indicate the project category. (Check all that apply) [help]

- ☑ Commercial
- ☑ Residential
- ☑ Institutional
- ☑ Transportation
- ☑ Recreational
- ☑ Maintenance
- ☑ Environmental Enhancement

6c. Indicate the major elements of your project. (Check all that apply) [help]

- ☑ Aquaculture
- ☑ Bank Stabilization
- ☑ Boat House
- ☑ Boat Launch
- ☑ Boat Lift
- ☑ Bridge
- ☑ Bulkhead
- ☑ Buoy
- ☑ Channel Modification
- ☑ Culvert
- ☑ Dam / Weir
- ☑ Dike / Levee / Jetty
- ☑ Ditch
- ☑ Dock / Pier
- ☑ Dredging
- ☑ Fence
- ☑ Ferry Terminal
- ☑ Fishway
- ☑ Float
- ☑ Geotechnical Survey
- ☑ Land Clearing
- ☑ Marina / Moorage
- ☑ Mining
- ☑ Outfall Structure
- ☑ Piling
- ☑ Retaining Wall (upland)
- ☑ Road
- ☑ Scientific Measurement Device
- ☑ Stairs
- ☑ Stormwater facility
- ☑ Swimming Pool
- ☑ Utility Line
- ☑ Other:

6d. Describe how you plan to construct each project element checked in 6c. Include specific construction methods and equipment to be used. [help]

- Identify where each element will occur in relation to the nearest waterbody.
- Indicate which activities are within the 100-year flood plain.

Proposed Maintenance Activities

The proposed Project includes both in-water dredging activities and fender pile replacement activities occurring within the 100-year floodplain. According to the Federal Emergency Management Agency (FEMA) Cowlitz County Flood Insurance Rate Maps (FIRMs), the Columbia River waterward of the Port’s berths is documented as an A4-rated floodplain (FEMA 2001). Floodplains rated A1 through A99 are areas of 100-year flood, and base elevations and flood hazard factors are already determined in these areas (FEMA 2001).

Dredging Volumes and Considerations

The Project is proposed to return the Port’s berths to their original depth of -40+2 feet CRD, and/or deepen and maintain them to align with the currently authorized depth of the Columbia River federal navigation channel of -43+2 feet CRD (maximum elevation of -45 feet CRD). The proposed actions may occur in phases as time and funding allows.

The Port requests authorization for 10 years of maintenance dredging to maintain its berths at the currently
permitted depth of -40+2 feet CRD or at the newly authorized depths of -43+2 feet CRD. Maintenance dredging would be conducted on an as-needed basis and maintenance dredging volumes could vary considerably as a result of the ever-changing sediment dynamics in the Columbia and Cowlitz rivers and the frequency of maintenance dredging.

Existing sediment quality data from Port berths and nearby areas indicates that dredged material is likely clean sand and gravel with chemical concentrations below Sediment Evaluation Framework (SEF) screening levels. Native alluvial sediments are expected below -42 feet CRD considering the maximum depth of past dredging activities (-40 feet CRD) plus allowance for disturbance of underlying sediments. The sediment quality of the dredged material proposed to be removed as part of the Project will be confirmed with sediment characterization; see the Project Sampling and Analysis Plan (SAP), prepared in accordance with SEF guidelines, for more information (Anchor QEA 2011).

The sediment quality ranking of the dredged material will be the factor that determines how many years the initial sediment characterization results will remain valid. For example, based on the existing data, it is anticipated that the initial sediment characterization will result in a moderate sediment designation that will allow the sediment characterization to be valid for a period of 5 years. However, the specific ranking resulting from the sediment characterization process cannot be determined until the sediment characterization process is completed and validated by the U.S. Army Corps of Engineers (USACE).

In both the deepening and maintenance dredge scenarios, river sediments will be removed primarily from between the face of the berths and the federal navigation channel line, including approach lanes within portions of Berths 1, 2, and 8 that extend slightly past the federal navigation channel limits, as shown on Sheets 3, 4, and 5 (Attachment 1). Estimated dredge volumes for the maintenance dredging and berth deepening work in each berth area are identified in Tables 1 and 2. These volumes include allowances for the adjacent side slope sediments that are anticipated to slough into the berth area during dredging (i.e., side slope volumes).

**Table 1**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Berth 1</td>
<td>0.51</td>
<td>2,050</td>
<td>1,260</td>
<td>3,310</td>
</tr>
<tr>
<td>Berth 2</td>
<td>1.67</td>
<td>5,390</td>
<td>2,670</td>
<td>8,060</td>
</tr>
<tr>
<td>Berth 4</td>
<td>0.87</td>
<td>850</td>
<td>550</td>
<td>1,400</td>
</tr>
<tr>
<td>Berth 5</td>
<td>2.52</td>
<td>1,210</td>
<td>1,000</td>
<td>2,210</td>
</tr>
<tr>
<td>Berth 6</td>
<td>1.05</td>
<td>3,110</td>
<td>820</td>
<td>3,930</td>
</tr>
<tr>
<td>Berth 7</td>
<td>1.50</td>
<td>7,540</td>
<td>2,080</td>
<td>9,620</td>
</tr>
<tr>
<td>Berth 8</td>
<td>1.70</td>
<td>6,310</td>
<td>2,630</td>
<td>8,940</td>
</tr>
<tr>
<td>Berth 9</td>
<td>12.70</td>
<td>10</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>22.52</td>
<td>26,470</td>
<td>11,030</td>
<td>37,500</td>
</tr>
</tbody>
</table>

*Note: * There is no Berth 3 at the Port and Berth 4 is not in operation.
### Table 2
Estimated Berth Deepening Dredge Volumes

<table>
<thead>
<tr>
<th>Berth*</th>
<th>Berth Area (acres)</th>
<th>Deepening Dredge Volume [-43 feet CRD Neatline] (cy)</th>
<th>Allowable Overdredge Volume [+2 feet] (cy)</th>
<th>Total Deepening Dredge Volume (cy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berth 1</td>
<td>0.51</td>
<td>4,450</td>
<td>1,980</td>
<td>6,430</td>
</tr>
<tr>
<td>Berth 2</td>
<td>1.67</td>
<td>10,150</td>
<td>4,000</td>
<td>14,140</td>
</tr>
<tr>
<td>Berth 4</td>
<td>0.87</td>
<td>2,180</td>
<td>1,340</td>
<td>3,520</td>
</tr>
<tr>
<td>Berth 5</td>
<td>2.52</td>
<td>3,580</td>
<td>2,220</td>
<td>5,800</td>
</tr>
<tr>
<td>Berth 8</td>
<td>1.70</td>
<td>11,530</td>
<td>4,960</td>
<td>16,490</td>
</tr>
<tr>
<td>Berth 9</td>
<td>12.70</td>
<td>1,730</td>
<td>4,850</td>
<td>6,580</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>33,620</td>
<td>19,350</td>
<td>52,960</td>
</tr>
</tbody>
</table>

*Note:* There is no Berth 3 at the Port and Berth 4 is not in operation.

### Dredged Material Placement

Because the material to be removed from around the berths is anticipated to be clean sands, the Port will work with USACE and other agencies to identify and agree upon a suitable location for in-water placement of dredged materials. Criteria for consideration in site selection include a site approximately 300 feet or more outside of the federal navigation channel, and a preferred depth of below -50 feet CRD, although some shallower areas may also be suitable. Based on the criteria supplied by USACE for consideration in selecting an in-water dredged material placement site, two potential locations have been identified for the Project. One is at RM 62, near the Barlow Point property purchased by the Port in 2010. The other is downstream at RM 56, near the confluence of Germany Creek. The characteristics of these sites are consistent with the USACE criteria regarding depth (greater than -50 feet CRD) and outside of the navigation channel. In addition, these potential sites are within close proximity to the Port facilities. These sites are being recommended as a suitable in-water placement locations based on available information. Although they appear suitable for placement, a final determination will be made by the Port and USACE, and other beneficial use or placement options may be considered. These areas are identified on Sheets 1 and 2.

### Structural Considerations

KPFF was hired as a subcontractor to Anchor QEA to perform a preliminary structural review of the Port’s berthing facilities and evaluate the structural implications of deepening all of the Port’s berths. KPFF (2010) found that fender piles at Berths 1 through 7 would likely need to be replaced under both the maintenance dredging and berth deepening scenarios. Berth deepening can occur at Berth 8 with no structural impacts and Berth 9 was designed to be maintained at -45+2 feet CRD.

### Construction Methods

The anticipated construction methods for dredging are described below in general terms. The construction specifications for the Project will likely be performance-based, such that the contractor will select the specific equipment and construction methods that are best suited to Project performance requirements. It is anticipated that mechanical dredging using a clamshell bucket will be the preferred dredging technology for deepening because dense, gravelly materials commonly found in the bed of the Columbia River (native alluvium) may be encountered in portions of the dredge prism at greater depths.
Dredged sediments are proposed to be placed at an in-water location in the Columbia River, such as the sites at RMs 56 and 62 described in the previous section. The location of the in-water placement site will be identified by the Port, USACE, and other agencies upon approval of the Project sediment characterization report by the Dredged Material Management Office (DMMO) and confirmation that the dredged material will meet in-water placement requirements. Dreged material would be transported via bottom-dump barge from the Project area to the in-water placement site. The barge would maneuver into position and open the bottom to release the dredged materials at the placement site.

Where possible, fender piles (i.e., 12- to 16-inch-diameter untreated wooden piles) will be removed using the vibratory method. The vibratory hammer will be attached to a crane located on a barge near the dock. The vibratory hammer will be clamped onto the pile and the crane will lift the vibratory hammer, pulling the pile from the sediment and out of the water. If a pile is broken or breaks during removal with a vibratory hammer, a chain will be used to attempt to entirely remove the broken pile. If the pile cannot be removed, the pile will be cut at the mudline.

Replacement fender piles will be installed from a barge using a vibratory hammer, as geologic conditions and load-bearing requirements allow this method to be used. Efforts will be made to install new piles in the hole vacated by removed piles to reduce the area of substrate being disturbed. Fender pile installation will involve placing a choker around the pile and setting it in place at the mudline. The vibratory hammer will be attached to the pile and engaged to vibrate the pile to the required elevation. Proofing with an impact hammer is not anticipated to be necessary due to the soft substrate in the area. Contractor staging will occur on barges and in existing developed upland areas. Best management practices (BMPs) are described in Attachment 2 that have been incorporated into the Project design and timing in order to minimize environmental effects and minimize the exposure of sensitive species to potential effects from dredging and pile pulling and installation.

6e. What are the start and end dates for project construction? (month/year) [help]

- If the project will be constructed in phases or stages, use JARPA Attachment D to list the start and end dates of each phase or stage.

| Start date: October 1, 2011 | End date: January 31, 2021 | See JARPA Attachment D |

6f. Describe the purpose of the project and why you want or need to perform it. [help]

The Columbia River Channel Improvement Project was completed in 2010, resulting in a federal navigation channel authorized to a depth of -43 feet CRD. As a result of that project, deeper draft vessels are able to navigate through the Columbia River. The purpose of the Port’s current proposed Project is to create deeper berthing depths and/or maintain previously authorized berthing depths to allow ships safe access to the Port’s berthing and marine support facilities, so the Port can competitively bid and secure marine trade opportunities domestically and overseas. The Port was a sponsor port for the Columbia River Channel Improvement Project and the Port needs to deepen its berths commensurate with the newly authorized navigation depth in the federal channel to allow unrestricted movement and berthing of deep-draft vessels. Material removed from around the berths is anticipated to be clean Columbia River sands. This material would be suitable for in-water placement and the Port will work in coordination with USACE and other
agencies to identify a suitable location or beneficial use for this material. Finally, as a result of maintenance dredging and deepening, replacement of fender piling may be necessary at Berths 1 through 7.

6g. Fair market value of the project, including materials, labor, machine rentals, etc. [help]

Approximately $4.2 million

6h. Will any portion of the project receive federal funding? [help]

- If yes, list each agency providing funds.

☐ Yes ☐ No ☐ Don't know

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Part 7–Wetlands: Impacts and Mitigation

☐ Check here if there are wetlands or wetland buffers on or adjacent to the project area. (If there are none, skip to Part 8.) [help]

7a. Describe how the project has been designed to avoid and minimize adverse impacts to wetlands. [help]

☐ Not applicable

No wetlands exist within the vicinity of the proposed Project.

7b. Will the project impact wetlands? [help]

☐ Yes ☐ No ☐ Don't know

7c. Will the project impact wetland buffers? [help]

☐ Yes ☐ No ☐ Don't know

7d. Has a wetland delineation report been prepared? [help]

- If yes, submit the report, including data sheets, with the JARPA package.

☐ Yes ☐ No

7e. Have the wetlands been rated using the Western Washington or Eastern Washington Wetland Rating System? [help]

- If yes, submit the wetland rating forms and figures with the JARPA package.

☐ Yes ☐ No

7f. Have you prepared a mitigation plan to compensate for any adverse impacts to wetlands? [help]

- If yes, submit the plan with the JARPA package and answer 7g.
- If No, or Not applicable, explain below why a mitigation plan should not be required.

☐ Yes ☐ No ☐ Not applicable

No wetlands exist within the vicinity of the proposed Project.

7g. Summarize what the mitigation plan is meant to accomplish, and describe how a watershed approach was used to design the plan. [help]

No wetlands exist within the vicinity of the proposed Project.

7h. Use the table below to list the type and rating of each wetland impacted; the extent and duration of the impact; and the type and amount of mitigation proposed. Or if you are submitting a mitigation plan with a similar table, you can state (below) where we can find this information in the plan. [help]
If no official name for the wetland exists, create a unique name (such as “Wetland 1”). The name should be consistent with other project documents, such as a wetland delineation report. Ecology wetland category based on current Western Washington or Eastern Washington Wetland Rating System. Provide the wetland rating forms with the JARPA package. Indicate the days, months or years the wetland will be measurably impacted by the activity. Enter “permanent” if applicable. Creation (C), Re-establishment/Rehabilitation (R), Enhancement (E), Preservation (P), Mitigation Bank/In-lieu fee (B).

Page number(s) for similar information in the mitigation plan, if available:

7i. For all filling activities identified in 7h., describe the source and nature of the fill material, the amount in cubic yards that will be used, and how and where it will be placed into the wetland. [help]

No wetlands exist within the vicinity of the proposed Project.

7j. For all excavating activities identified in 7h., describe the excavation method, type and amount of material in cubic yards you will remove, and where the material will be disposed. [help]

No wetlands exist within the vicinity of the proposed Project.

**Part 8—Waterbodies (other than wetlands): Impacts and Mitigation**

In Part 8, “waterbodies” refers to non-wetland waterbodies. (See Part 7 for information related to wetlands.) [help]

Check here if there are waterbodies on or adjacent to the project area. (If there are none, skip to Part 9.)

8a. Describe how the project is designed to avoid and minimize adverse impacts to the aquatic environment. [help]

☐ Not applicable

The Project is designed to avoid and minimize adverse impacts to the aquatic environment by performing maintenance activities to improve the condition of existing facilities and prevent scour from occurring along the substrate resulting from draft of incoming and outgoing vessels. The completed Project will result increased safety for personnel at the facility and improved environmental conditions. Dredged materials will be placed within the Columbia River to prevent a decrease in overall sediment bedload within the river. Additionally, during construction, BMPs will be implemented as described in Attachment 2.

8b. Will your project impact a waterbody or the area around a waterbody? [help]

☒ Yes ☐ No

8c. Have you prepared a mitigation plan to compensate for the project’s adverse impacts to non-wetland waterbodies? [help]

- If yes, submit the plan with the JARPA package and answer 8d.
- If No, or Not applicable, explain below why a mitigation plan should not be required.

☐ Yes ☒ No ☐ Not applicable

8d. Summarize what the mitigation plan is meant to accomplish. Describe how a watershed approach was used to design the plan.

- If you already completed 7g., you do not need to restate your answer here. [help]

No mitigation plan has been prepared for the Project.

8e. Summarize impact(s) to each waterbody in the table below. [help]
<table>
<thead>
<tr>
<th>Activity (clear, dredge, fill, pile drive, etc.)</th>
<th>Waterbody name</th>
<th>Impact location</th>
<th>Duration of impact</th>
<th>Amount of material to be placed in or removed from waterbody</th>
<th>Area (sq. ft. or linear ft.) of waterbody directly affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance dredging</td>
<td>Columbia River</td>
<td>In-water</td>
<td>Approximately 2 months annually (over 10 years)</td>
<td>Approximately 37,500 cubic yards of clean sediment will be removed from the berth areas</td>
<td>Approximately 279,414 sf</td>
</tr>
<tr>
<td>Berth deepening</td>
<td>Columbia River</td>
<td>In-water</td>
<td>Approximately 6 months total (over 10 years)</td>
<td>Approximately 52,960 cubic yards of clean sediment will be removed from the berth areas</td>
<td>Approximately 670,659 sf</td>
</tr>
<tr>
<td>In-water placement of dredged material</td>
<td>Columbia River</td>
<td>In-water</td>
<td>Approximately 2 months annually (over 10 years)</td>
<td>Approximately 90,460 cubic yards of clean sediment will be placed at an in-water site</td>
<td>To be determined based on final placement location</td>
</tr>
<tr>
<td>Replace dilapidated fender piles</td>
<td>Columbia River</td>
<td>In-water</td>
<td>Approximately 4 months (over 10 years)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. If no official name for the waterbody exists, create a unique name (such as “Stream 1”) The name should be consistent with other documents provided.

2. Indicate whether the impact will occur in or adjacent to the waterbody. If adjacent, provide the distance between the impact and the waterbody and indicate whether the impact will occur within the 100-year floodplain.

3. Indicate the days, months or years the waterbody will be measurably impacted by the work. Enter “permanent” if applicable.

8f. For all activities identified in 8e., describe the source and nature of the fill material, amount (in cubic yards) you will use, and how and where it will be placed into the waterbody. [help]

Because the material to be removed from around the berths is anticipated to be clean Columbia River sands, the Port is interested in working with the National Marine Fisheries Service (NMFS), the U.S. Fish and Wildlife Service (USFWS), and USACE to identify an in-water placement site for use in the Project. All dredged material is proposed to be placed in water at a downstream location (pending results of sediment characterization). Based on the criteria supplied to Anchor QEA by USACE for consideration in selecting an in-water dredged material placement site, potential locations have been identified in the Columbia River near Barlow Point at RM 62 and near Stella, Washington, at RM 56. Although these sites appear suitable for placement, final determination will be made by USACE, and other beneficial use or placement options may be considered.
8g. For all excavating or dredging activities identified in 8e., describe the method for excavating or dredging, type and amount of material you will remove, and where the material will be disposed. [help]

Dredging will be conducted using a clamshell bucket as the preferred technology for both maintenance dredging and berth deepening. The Project includes dredging accumulated sediments from a portion of the Port’s existing berths within the Columbia River. These areas would be dredged to a neatline elevation of -43 feet CRD, with an appropriate authorized overdepth allowance (assumed to be an additional 2 feet). The dredge volume is estimated to be approximately 35,700 cubic yards for maintenance dredging and approximately 52,960 cubic yards for berth deepening. The Project footprint encompasses approximately 22.5 acres. Dredged materials will be transported to an in-water placement site as proposed in Section 8f.

Part 9—Additional Information

Any additional information you can provide helps the reviewer(s) understand your project. Complete as much of this section as you can. It is ok if you cannot answer a question.

9a. If you have already worked with any government agencies on this project, list them below. [help]

<table>
<thead>
<tr>
<th>Agency Name</th>
<th>Contact Name</th>
<th>Phone</th>
<th>Most Recent Date of Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Army Corps of Engineers</td>
<td>Steve Gagnon</td>
<td>(503) 808-4379</td>
<td>February 2011</td>
</tr>
<tr>
<td>National Marine Fisheries Service</td>
<td>Shandra O’Halleck</td>
<td>(360) 753-9533</td>
<td>March 2011</td>
</tr>
<tr>
<td>Washington Department of Fish and Wildlife</td>
<td>Steve West</td>
<td>(360) 906-6720</td>
<td>January 2011</td>
</tr>
<tr>
<td>Cowlitz County</td>
<td>Ron Melin</td>
<td>(360) 571-6661</td>
<td>January 2011</td>
</tr>
<tr>
<td>City of Longview</td>
<td>Steve Langdon</td>
<td>(360) 442-5083</td>
<td>January 2011</td>
</tr>
</tbody>
</table>

9b. Are any of the wetlands or waterbodies identified in Part 7 or Part 8 on the Washington Department of Ecology’s 303(d) List? [help]

- If yes, list the parameter(s) below.

☒ Yes ☐ No

The Columbia River in the vicinity of the Project is included on the Washington State Department of Ecology (Ecology) 303(d) List as a Category 5 for fecal coliform. The Category 5 rating includes waters for which at least one characteristic or designated use is impaired, as evidenced by failure to attain the applicable water quality standard for one or more pollutants (Ecology 2009).

9c. What U.S. Geological Survey Hydrological Unit Code (HUC) is the project in? [help]

- Go to http://cfpub.epa.gov/surf/locate/index.cfm to help identify the HUC.

Lower Cowlitz Watershed – 17080005

9d. What Water Resource Inventory Area Number (WRIA #) is the project in? [help]

- Go to http://www.ecy.wa.gov/services/gis/maps/wria/wria.htm to find the WRIA #.

WRIA 25 – Grays/Elochoman

9e. Will the in-water construction work comply with the State of Washington water quality standards for turbidity? [help]

| ☑ Yes | ☐ No | ☐ Not applicable |

**9f.** If the project is within the jurisdiction of the Shoreline Management Act, what is the local shoreline environment designation? [help]
- If you don’t know, contact the local planning department.

| ☐ Rural | ☑ Urban | ☐ Natural | ☐ Aquatic | ☐ Conservancy | ☐ Other | ☐ | ☐ | ☐ |

**9g.** What is the Washington Department of Natural Resources Water Type? [help]

| ☑ Shoreline | ☐ Fish | ☐ Non-Fish Perennial | ☐ Non-Fish Seasonal |

**9h.** Will this project be designed to meet the Washington Department of Ecology’s most current stormwater manual? [help]
- If no, provide the name of the manual your project is designed to meet.

| ☑ Yes | ☐ No |

Name of manual:

**9i.** If you know what the property was used for in the past, describe below. [help]

The Port was established in the adjacent town of Kelso as a full-service port along the shipping channel of the Columbia River (as the Port of Kelso) in 1921. In 1925, the Port was relocated to the subject property and was renamed (as the Port of Longview) in 1929. The Port specialized in shipping lumber and paper products to Asia. In 1940, the Reynolds Metal Company was established in Longview and collaborated with the Port in shipping metal and other materials in support of World War II. In the post-war years, the Port became a U.S. customs port of entry and expanded its operations to exporting and importing goods from around the world including good such as logs, grain, paper, pulp, aluminum, and food (McClary 2008).

**9j.** Has a cultural resource (archaeological) survey been performed on the project area? [help]
- If yes, attach it to your JARPA package.

| ☑ Yes | ☐ No |

Please see Attachment 4 for the Section 106 Compliance Memo

**9k.** Name each species listed under the federal Endangered Species Act that occurs in the vicinity of the project area or might be affected by the proposed work. [help]

According to the Project Biological Evaluation (Attachment 3), federally listed species that may occur in the vicinity of the Project include the following:
- Chinook salmon (*Oncorhynchus tshawytscha*) – Lower Columbia River Evolutionarily Significant Unit (ESU), Upper Columbia River Spring Run ESU, Snake River Spring/Summer Run ESU, Snake River Fall Run ESU, and Upper Willamette River ESU
- Chum salmon (*O. keta*) – Columbia River ESU
- Coho salmon (*O. kisutch*) – Lower Columbia River ESU
- Sockeye salmon (*O. nerka*) – Snake River ESU
- Steelhead trout (*O. mykiss*) – Lower Columbia River Distinct Population Segment (DPS), Middle Columbia River DPS, Upper Columbia River DPS, Snake River Basin DPS, and Upper Willamette ESU.
River DPS
- Bull trout (*Salvelinus confluentus*) – Lower Columbia River DPS
- North American green sturgeon (*Acipenser medirostris*) – Southern DPS
- Columbia River smelt (*eulachon; Thaleichthys pacificus*) – Southern DPS
- Steller sea lion (*Eumetopias jubatus*) – Eastern DPS

**9l.** Name each species or habitat on the Washington Department of Fish and Wildlife’s Priority Habitats and Species List that might be affected by the proposed work. [help]

The following Priority Habitats and Species (PHS) may occur on or in proximity to the site, according to the State of Washington PHS List (WDFW 2008):
- Pacific lamprey (*Lampetra tridentata*)
- River lamprey (*Lampetra ayresi*)
- White sturgeon (*Acipenser transmontanus*)
- Leopard dace (*Rhinichthys falcatus*)
- Coastal resident/searun cutthroat (*Oncorhynchus clarki clarki*)
- Pink salmon (O. *gorbuscha*)
- Olympic mudminnow (*Novumbra hubbsi*)
- Biodiversity area and corridor habitat
- Fresh deepwater habitat
Part 10–SEPA Compliance and Permits

Use the resources and checklist below to identify the permits you are applying for.

- Governor's Office of Regulatory Assistance at (800) 917-0043 or [help@ora.wa.gov](mailto:help@ora.wa.gov).
- For a list of agency addresses to send your application, click on the "where to send your completed JARPA" at [http://www.epermitting.wa.gov](http://www.epermitting.wa.gov).

### 10a. Compliance with the State Environmental Policy Act (SEPA)

- (Check all that apply.)
  - [ ] A copy of the SEPA determination or letter of exemption is included with this application.
  - [ ] A SEPA determination is pending with the Port of Longview (lead agency). The expected decision date is May 13, 2011.
  - [ ] I am applying for a Fish Habitat Enhancement Exemption. (Check the box below in 10b.)
  - [ ] This project is exempt (choose type of exemption below).
    - [ ] Categorical Exemption. Under what section of the SEPA administrative code (WAC) is it exempt? __
    - [ ] Other: _______________
  - [ ] SEPA is pre-empted by federal law.

### 10b. Indicate the permits you are applying for

- (Check all that apply.)

#### LOCAL GOVERNMENT

- Local Government Shoreline permits:
  - [ ] Substantial Development
  - [ ] Conditional Use
  - [ ] Variance
  - [ ] Shoreline Exemption Type (explain): Shoreline exemption is required for maintenance activities. As dredged materials will be disposed of in-water, Cowlitz County and the City of Longview will not require a Shoreline Substantial Development Permit; shoreline exemptions are expected under WAC 173-27-040 to cover the replacement of damaged fender piles.

- Other city/county permits:
  - [ ] Floodplain Development Permit
  - [ ] Critical Areas Ordinance

#### STATE GOVERNMENT

- Washington Department of Fish and Wildlife:
  - [ ] Hydraulic Project Approval (HPA)
  - [ ] Fish Habitat Enhancement Exemption

- Washington Department of Ecology:
  - [ ] Section 401 Water Quality Certification

- Washington Department of Natural Resources:
  - [ ] Aquatic Resources Use Authorization

#### FEDERAL GOVERNMENT

- United States Department of the Army permits (U.S. Army Corps of Engineers):
  - [ ] Section 404 (discharges into waters of the U.S.)
  - [ ] Section 10 (work in navigable waters)*
  - * Maintenance dredging and fender replacement will be covered under a Nationwide Permit 3 for Maintenance Activities

- United States Coast Guard permits:
  - [ ] General Bridge Act Permit
  - [ ] Private Aids to Navigation (for non-bridge projects)
Part 11–Authorizing Signatures

Signatures are required before submitting the JARPA package. The JARPA package includes the JARPA form, project plans, photos, etc. [help]

11a. Applicant Signature (required) [help]

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities, and I agree to start work only after I have received all necessary permits.

I hereby authorize the agent named in Part 3 of this application to act on my behalf in matters related to this application. (initial)

By initialing here, I state that I have the authority to grant access to the property. I also give my consent to the permitting agencies entering the property where the project is located to inspect the project site or any work related to the project. (initial)

Lisa A. Hendrickson
Applicant Printed Name

Applicant Signature

Date

11b. Authorized Agent Signature [help]

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities and I agree to start work only after all necessary permits have been issued.

Derek Koellmann
Authorized Agent Printed Name

Authorized Agent Signature

Date

April 13, 2011

11c. Property Owner Signature (If not applicant). [help] Not required if project is on existing rights-of-way or easements.

I consent to the permitting agencies entering the property where the project is located to inspect the project site or any work. These inspections shall occur at reasonable times and, if practical, with prior notice to the landowner.

Property Owner Printed Name

Property Owner Signature

Date

18 U.S.C §1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious, or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious, or fraudulent statement or entry, shall be fined not more than $10,000 or imprisoned not more than 5 years or both.

If you require this document in another format, contact The Governor's Office of Regulatory Assistance (ORA). People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341.

ORA publication number: ENV-019-09
References Cited


ATTACHMENT 1
JARPA SHEETS
PURPOSE: BERTH MAINTENANCE DREDGING AND DEEPENING

DATUM: WASHINGTON STATE PLANE SOUTH, NAD83. (US SURVEY FEET) VERTICAL: CRD LATITUDE: 46°10'34"N
LONGITUDE: -122°94'99"W
S-T-R: 8-7N-2W
SITE LOCATION ADDRESS:
10 PORT WAY
LONGVIEW, WA 98632-7739

NAME: PORT OF LONGVIEW BERTH MAINTENANCE DREDGING AND DEEPENING PROJECT

ADJACENT PROPERTY OWNERS:
1 - R&R TRADING INC.
2 - PACIFIC LUMBER & SHIPPING, LLC
3 - Weyerhaeuser Company
4 - Jones Stevedoring Company

PROPOSED: BERTH MAINTENANCE ACTIVITIES

IN: COLUMBIA RIVER
NEAR/AT: CITY OF LONGVIEW
COUNTY OF: COWLITZ
STATE: WASHINGTON

DATE: MARCH 2011

Sheet: 1 of 7
PURPOSE: BERTH MAINTENANCE DREDGING AND DEEPENING
DATUM: WASHINGTON STATE PLANE SOUTH, NAD83. (US SURVEY FEET) VERTICAL: CRD
LATITUDE: 46°10'34"N
LONGITUDE: -122°94'99"W
S-T-R: 8-7N-2W
SITE LOCATION ADDRESS:
10 PORT WAY
LONGVIEW, WA 98632-7739

NAME: PORT OF LONGVIEW BERTH MAINTENANCE DREDGING AND DEEPENING PROJECT

ADJACENT PROPERTY OWNERS:
1 - R&R TRADING INC.
2 - PACIFIC LUMBER & SHIPPING, LLC
3 - WEYERHAEUSER COMPANY
4 - JONES STEVEDORING COMPANY

PROPOSED: BERTH MAINTENANCE ACTIVITIES
IN: COLUMBIA RIVER
NEAR/AT: CITY OF LONGVIEW
COUNTY OF: COWLITZ
STATE: WASHINGTON

DATE: MARCH 2011

SHEET: 2 OF 7
The location of all port facilities and docks displayed on this drawing were provided by the Port of Longview. The linework for all docks and port features displayed here is for informational purposes only and should not be considered survey grade accuracy.

LEGEND:
- Limits of Maintenance and Deepening Dredging
- -40' CRD Elevation Contour
- -43' CRD Elevation Contour

SITE PLAN (1 OF 3)
NOTES:
The location of all port facilities and docks displayed on this drawing were provided by the Port of Longview. The linework for all docks and port features displayed here is for informational purposes only and should not be considered survey grade accuracy.

LEGEND:
- Limits of Maintenance and Deepening Dredging
- -40' CRD Elevation Contour
- -43' CRD Elevation Contour

SITE PLAN (2 OF 3)
The location of all port facilities and docks displayed on this drawing were provided by the Port of Longview. The linework for all docks and port features displayed here is for informational purposes only and should not be considered survey grade accuracy.

**LEGEND:**

- Limits of Maintenance and Deepening Dredging
- -40' CRD Elevation Contour
- -43' CRD Elevation Contour

**SITE PLAN (3 OF 3)**
Cross Section A-A'

Cross Section B-B'

Cross Section C-C'

Cross Section D-D'

DREDGE PRISM CROSS SECTIONS

DATE: MARCH 2011

IN: COLUMBIA RIVER

NEAR/AT: CITY OF LONGVIEW

COUNTY OF: COWLITZ

STATE: WASHINGTON

NAME: PORT OF LONGVIEW BERTH MAINTENANCE DREDGING AND DEEPENING PROJECT

PROPOSED: BERTH MAINTENANCE ACTIVITIES

ADJACENT PROPERTY OWNERS:
1 - R&R TRADING INC.
2 - PACIFIC LUMBER & SHIPPING, LLC
3 - WEYERHAUSEN COMPANY
4 - JONES STEVEDORING COMPANY

PURPOSE: BERTH MAINTENANCE DREDGING AND DEEPENING

DATUM: WASHINGTON STATE PLANE SOUTH, NAD83. (US SURVEY FEET) VERTICAL: CRD

LATITUDE: 46°10'34"N

LONGITUDE: -122°9'49"W

S-T-R: 8-7N-2W

SITE LOCATION ADDRESS:
10 PORT WAY
LONGVIEW, WA 98632-7739

NAME: PORT OF LONGVIEW BERTH MAINTENANCE DREDGING AND DEEPENING PROJECT

PROPOSED: BERTH MAINTENANCE ACTIVITIES

IN: COLUMBIA RIVER

NEAR/AT: CITY OF LONGVIEW

COUNTY OF: COWLITZ

STATE: WASHINGTON

DATE: MARCH 2011
The following best management practices (BMPs) and conservation measures will be implemented to minimize environmental impacts during the Port of Longview Berth Maintenance Dredging and Deepening Project:

- Work will be done during the U.S. Army Corps of Engineers (USACE)-approved fish protection work window of October 1 through January 31.
- Turbidity and other water quality parameters will be monitored to ensure construction activities are in compliance with Washington State Surface Water Quality Standards (173-201A Washington Administrative Code [WAC]), or other conditions as specified in the Water Quality Certification (WQC).
- Appropriate BMPs will be employed to minimize sediment loss and turbidity generation during dredging. BMPs may include, but are not limited to, the following:
  - Eliminating multiple bites while the bucket is on the bottom
  - No stockpiling of dredged material on the riverbed
  - No riverbed leveling
  - Other conditions as specified in the WQC
- Depending on the results of the water quality monitoring program, enhanced BMPs may also be implemented to further control of turbidity. Enhanced BMPs may include, but are not limited to, the following:
  - Slowing the velocity (i.e., increasing the cycle time) of the ascending loaded clamshell bucket through the water column
  - Pausing the dredge bucket near the bottom while descending and near the water line while ascending
  - Placing filter material over the barge scuppers to clear return water
- The barge will be managed such that the dredged sediment load does not exceed the capacity of the barge. The load will be placed in the barge to maintain an even keel and avoid listing. If determined to be necessary based on sediment sampling results, hay bales and/or filter fabric may be placed over the barge scuppers to help filter suspended sediment from the barge effluent.
- Dredge vessel personnel will be trained in hazardous material handling and spill response and will be equipped with appropriate response tools, including absorbent oil booms. If a spill occurs, spill cleanup and containment efforts will begin...
immediately and will take precedence over normal work.

- The dredging contractor will inspect fuel hoses, oil or fuel transfer valves, and fittings on a regular basis for drips or leaks in order to prevent spills into the surface water.
- The contractor shall be responsible for the preparation of a Spill, Prevention, Control, and Countermeasure (SPCC) Plan to be used for the duration of the Project. The SPCC Plan shall be submitted to the Project Engineer prior to the commencement of any construction activities. A copy of the SPCC Plan, and any updates, will be maintained at the work site by the contractor and will include the following:
  - The SPCC Plan shall identify construction planning elements and recognize potential spill sources at the site. The SPCC Plan shall outline responsive actions in the event of a spill or release and shall describe notification and reporting procedures. The SPCC Plan shall outline contractor management elements such as personnel responsibilities, Project site security, site inspections, and training.
  - The SPCC Plan will outline what measures shall be taken by the contractor to prevent the release or spread of hazardous materials, either found on site and encountered during construction but not identified in contract documents, or any hazardous materials that the contractor stores, uses, or generates on the construction site during construction activities. These items include, but are not limited to, gasoline, oils, and chemicals. Hazardous materials are defined in Revised Code of Washington (RCW) 70.105.010 under “hazardous substance.”
  - The contractor shall maintain at the job site the applicable equipment and material designated in the SPCC Plan.

The following BMPs and conservation measures will be implemented to minimize environmental impacts during dredged material transport and placement:

- Visual water quality monitoring and, if necessary, follow-up measurements will be conducted around the barge at the removal site and in transit to the in-water placement location to confirm that material is not being released during transit.
- At the point(s) of in-water placement, turbidity and other water quality parameters will be monitored to ensure construction activities are in compliance with Washington State Surface Water Quality Standards (173-201A WAC), or other conditions as specified in the WQC.
The following pile removal BMPs adapted from U.S. Environmental Protection Agency guidance (USEPA 2007) and a National Marine Fisheries Service Biological Opinion (NMFS 2008) will also be employed for removal of the untreated wooden fender piles:

- The contractor will initially vibrate the pile to break the friction bond between pile and soil.
- To help minimize turbidity, the contractor will engage the vibrator to the minimum extent required to initiate vertical pile movement, and will disengage the vibrator once the pile has been mobilized and is moving upward.
- The piles will be removed in a single, slow, and continuous motion to the extent possible.
- Pile cutoff will be an acceptable alternative where vibratory extraction or pulling is not feasible as described below. In addition, if a pile is broken or breaks during vibratory extraction, the contractor will employ the following methods:
  - A chain will be used if practicable to attempt to entirely remove the broken pile.
  - If the entire pile cannot be removed, the pile will be cut at the mudline.

- Upon removal from the substrate, the pile will be moved expeditiously from the water to a barge, and then offloaded for disposal or recycling if possible.
- Replacement fender piles will be in-kind, as noted above.
ATTACHMENT 3
BIOLOGICAL EVALUATION
ATTACHMENT 4
SECTION 106 COMPLIANCE MEMO